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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/800,909

03/15/2004

William Scars

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46333 7590 06/15/2007  
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EXAMINER

SCHILLINGER, ANN M

ART UNIT

PAPER NUMBER

3738

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/800,909	<b>Applicant(s)</b> SEARS ET AL.	
	<b>Examiner</b> Ann Schillinger	<b>Art Unit</b> 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 12, 15, 16, 19-21, 25, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Bryan et al. (US Pat. No. 6,156,067). Bryan et al. discloses the following of claim 1: a motion-preserving implant device comprising: a first plate (32) for engaging with a first bone (12), the first plate comprising a first recessed surface (62); a second plate (34) for engaging with a second bone (14), the second plate comprising a second recessed surface (64); an articulation member (outer periphery of element 20) positioned entirely between the two plates; and a motion-controlling member (22, 24) extending between the first and second recessed surfaces (see Figure 3).

Bryan et al. discloses the limitations of claims 2 and 3 in col. 4, lines 7-25.

Bryan et al. discloses the following of claim 4: the device of claim 1 wherein the motion-controlling member includes a plurality of elastic members (22, 24).

Bryan et al. discloses the following of claim 5: a spinal implant for insertion between two vertebral bodies, comprising: a first plate (32) for engaging with the first vertebral body (12), the first plate comprising a first recessed surface (62); a second plate (34) for engaging with the second vertebral body (14), the second plate comprising a second recessed surface (64); an articulation member (outer periphery of element 20) positioned entirely between the two plates

Art Unit: 3738

(see Figure 3); and an elastic motion-controlling member (22, 24) positioned between the first and second recessed surfaces (see Figure 3).

Bryan et al. discloses the limitations of claim 7 in col. 4, lines 20-25.

Bryan et al. discloses the following of claim 12: the spinal implant of claim 5 wherein the motion-controlling member includes a plurality of elastic members components (22, 24).

Bryan et al. discloses the limitations of claims 15, 16, and 21 in col. 4, lines 2-35.

Bryan et al. discloses the limitations of claims 19 and 20 as shown in Figure 3.

Bryan et al. discloses the following of claim 25: the spinal implant of claim 12 wherein at least one of the elastic members (22) is attached to one of the a plates via an attachment mechanism (110).

Bryan et al. discloses the following of claim 27: an implant comprising: a first plate (32) for engaging with a first bone (12) and comprising a recessed surface (62) adjacent to a convex articulation surface (52); a second plate (34) for engaging with a second bone (14) and comprising a concave articulation surface (64) in articulating engagement with the convex articulation surface (54); and a motion-controlling member (24) positioned between the recessed surface and the second plate (see Figure 3).

Claims 1-3, 5, 6, 7, 10, 15, 16, 12, 15, 16, 22, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Buttner-Janz et al. (US Pat. No. 5401269). Buttner-Janz et al. discloses the following of claim 1: a motion-preserving implant device comprising: a first plate (2) for engaging with a first bone (col. 2, line 63 through col. 3, line 2), the first plate comprising a first recessed surface (6); a second plate (1) for engaging with a second bone (col. 2, line 63 through

Art Unit: 3738

col. 3, line 23), the second plate comprising a second recessed surface (6); an articulation member (3) positioned entirely between the two plates (see Figures 1-15); and a motion-controlling member (outer periphery of element 10; 7, 8) extending between the first and second recessed surfaces.

Buttner-Janz et al. discloses the limitations of claims 2, 3, 15, and 16 in col. 3, lines 3-20.

Buttner-Janz et al. discloses the following of claim 5: a motion-preserving implant device comprising: a first plate (2) for engaging with a first bone (col. 2, line 63 through col. 3, line 2), the first plate comprising a first recessed surface (6); a second plate (1) for engaging with a second bone (col. 2, line 63 through col. 3, line 23), the second plate comprising a second recessed surface (6); an articulation member (outer periphery of element 10; 7, 8) positioned entirely between the two plates (see Figures 1-15); and a motion-controlling member (3) extending between the first and second recessed surfaces.

Buttner-Janz et al. discloses the limitations of claim 6 in col. 1, lines 4-9 and col. 2, lines 15-28.

Buttner-Janz et al. discloses the limitations of claim 10 in element 11, Figure 8.

Buttner-Janz et al. discloses the limitations of claims 22 and 24 in Figure 8 where the first plurality of recesses are 6 and 12 of the plate 2 and the second plurality of recesses are those corresponding to plate 1.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 3738

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan et al. or Buttner-Janz et al. in view of Rogozinski (US Pat. No. 5888226). Bryan et al. and Buttner-Janz et al. disclose the invention substantially as claimed, they probably do not disclose using a non-elastic ball and socket. Rogozinski teaches using a non-elastic ball and socket in col. 1, lines 42-61; and col. 3, line 47 through col. 4, line 38 for the purpose of making the disc more durable. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a non-elastic ball and socket in order to make the disc more durable.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan et al. or Buttner-Janz et al. in view of Berry (U.S. Pat. No. 5,895,428). Bryan et al. and Buttner-Janz et al. disclose the invention substantially as claimed, however they probably do not disclose using an amorphous oxide coating on the implant's plates. Berry teaches using an amorphous oxide coating on the implant's plates. Berry teaches this in col. 10, lines 38-42 and 56-57 for the purpose of decreasing the frictional wear on the implant over time. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use this type of coating to prevent the implant from being damaged by friction.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan et al. or Buttner-Janz et al. in view of McDaniel et al. (U.S. Pat. No. 4454612). Bryan et al. and Buttner-Janz et al. disclose the invention substantially as claimed, however they probably do not disclose using UHMWP on the motion-controlling members. McDaniel et al. teaches using UHMWP on the motion-controlling members in col. 3, lines 29-49; col. 4, lines 35-46 for the purpose of improving the resiliency of the implant. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made, to use this type of coating in order to improving the resiliency of the implant.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan et al. in view of Xavier et al. (U.S. Pat. No. 6063121). Bryan et al. discloses the invention substantially as claimed, however Bryan et al. probably does not disclose using a cord with the motion-controlling member. Xavier et al. teaches using a cord with the motion-controlling member in col. 4, lines 21-43 for the purpose of reinforcing the motion-controlling member's structure. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cord with the motion-controlling member in order to reinforce the motion-controlling member's structure.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan et al. in view of Michelson (U.S. Pat. No. 6,350,283). Bryan et al. discloses the invention substantially as claimed, however Bryan et al. probably does not disclose using a bio-resorbable material on the elastic members. Michelson teaches using a bio-resorbable material on the elastic members in col. 2, lines 47-67 for the purpose of allowing those implant parts to be biologically replaced in the body over time. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use a bio-resorbable material on the elastic members in order to allow those implant parts to be biologically replaced in the body over time.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan et al. in view of Rabbe et al. (U.S. Pat. No. 5776197). Bryan et al. discloses the invention substantially as claimed, however Bryan et al. probably does not disclose having hollow portions in the implant. Rabbe et al. teaches using hollow portions in col. 3, lines 40-50 for the purpose of

Art Unit: 3738

allowing bone ingrowth. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to include hollow portions in order to allow bone ingrowth.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan et al. in view of Ray et al. (U.S. Pat. No. 4,772,287). Bryan et al. discloses the invention substantially as claimed, however, Bryan et al. probably does not disclose using gel in the elastic members. Ray et al. teaches using gel in the elastic members in col. 3, lines 8-17 because gel has inherent properties that mimic the natural movement of intradiscal nuclear tissue. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use gel in the elastic members of the implant because their viscosity and velocity-shear behavior matches that of the intradiscal nuclear tissue.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buttner-Janz et al. in view of Hochshuler et al. (U.S. Pat. No. 6,576,016). Buttner-Janz et al. discloses the invention substantially as claimed, however, Buttner-Janz et al. probably does not disclose arranging the plurality of recesses in a circular dove-tail shape. Hochshuler et al. teaches arranging the plurality of recesses in a circular dove-tail shape in col. 2, lines 15-67 for the purpose of conforming to the shape of the plates and the vertebrae. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the plurality of recesses in a circular dove-tail shape in order to conform to the shape of the plates and the vertebrae.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-25 and 27 have been considered but are moot in view of the new ground(s) of rejection.



***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Schillinger whose telephone number is (571) 272-6652. The examiner can normally be reached on Mon. thru Fri. 9 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3738

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ann Schillinger  
June 1, 2007

*A. Stewart*  
**ALVIN J. STEWART**  
**PRIMARY EXAMINER**